

CLAIMS

- 1. (presently amended) A capacitive touch pad comprising ~~first~~cover and ~~second~~first layers,
the ~~first~~cover layer comprising a non-conductive cover providing galvanic isolation of the ~~second~~first layer,
the ~~second~~first layer comprising a plurality of row-shaped row-sensing electrodes and a row-by-column array of column-sensing electrodes,
each column of column-sensing electrodes interconnected by conductive traces,
the row-sensing electrodes and column-sensing electrodes defining interleaved combs therebetween,
each comb comprising at least two fingers.
- 2. (original) The capacitive touch pad of claim 1 wherein the fingers are no wider than eight mils.
- 3. (original) The capacitive touch pad of claim 1 wherein the fingers define spaces therebetween, and the spaces are no wider than eight mils.
- 4. (presently amended) The capacitive touch pad of claim 1 further comprising a ~~third~~second layer, the ~~second~~first layer lying between the ~~first~~cover and ~~third~~second layers, the ~~third~~second layer comprising a ground plane.
- 5. (presently amended) The capacitive touch pad of claim 4 further comprising a ~~fourth~~third layer, the ~~third~~second layer lying between the ~~second~~first and ~~fourth~~third layers, the ~~fourth~~third layer bearing circuitry.
- 6. (presently amended) The capacitive touch pad of claim 1 wherein in the ~~second~~first layer further comprises annular copper around the electrodes.

- 7. (original) The capacitive touch pad of claim 6 wherein the annular copper is connected to ground potential.

- 8. (canceled)

- 9. (presently amended) The capacitive touch pad of claim 4 further comprising an isolator/dielectric layer between the ~~second~~first and ~~third~~second layers.

- 10. (presently amended) The capacitive touch pad of claim 5 further comprising an isolator/dielectric layer between the ~~third~~second and ~~fourth~~third layers.

- 11. (previously presented) The capacitive touch pad of claim 1 wherein the number of rows is at least three and the number of columns is at least three.

- 12. (presently amended) The capacitive touch pad of claim 11 wherein the number of rows is at least ~~ten~~eleven and the number of columns is at least thirteen.

- 13. (new) A capacitive touch pad comprising cover and first layers,

the cover layer comprising a non-conductive cover providing galvanic isolation of the first layer,

the first layer comprising a plurality of row-shaped row-sensing electrodes and a row-by-column array of column-sensing electrodes,

each column of column-sensing electrodes interconnected by conductive traces,

the row-sensing electrodes and column-sensing electrodes defining interleaved combs therebetween,

each comb comprising at least two fingers,

the touch pad further comprising a second layer, the first layer lying between the cover and second

layers, the second layer comprising a ground plane.

- 14. (new) The capacitive touch pad of claim 13 further comprising a third layer, the second layer lying between the first and third layers, the third layer bearing circuitry.

- 15. (new) A capacitive touch pad comprising cover and first layers,

the cover layer comprising a non-conductive cover providing galvanic isolation of the first layer,

the first layer comprising a plurality of row-shaped row-sensing electrodes and a row-by-column array of column-sensing electrodes,

each column of column-sensing electrodes interconnected by conductive traces,

the row-sensing electrodes and column-sensing electrodes defining interleaved combs therebetween,

each comb comprising at least two fingers,

wherein in the first layer further comprises annular copper around the electrodes.

- 16. (new) The capacitive touch pad of claim 15 wherein the annular copper is connected to ground potential.

- 17. (new) The capacitive touch pad of claim 13 further comprising an isolator/dielectric layer between the first and second layers.

- 18. (new) The capacitive touch pad of claim 14 further comprising an isolator/dielectric layer between the second and third layers.

-19. (new) A capacitive touch pad, the touch pad defining top, bottom, left, and right edges, the pad comprising cover and first layers,

the cover layer comprising a non-conductive cover providing galvanic isolation of the first layer,

the first layer comprising a plurality of row-shaped row-sensing electrodes each extending toward the left and right edges, and a row-by-column array of column-sensing electrodes,

each column of column-sensing electrodes interconnected by conductive traces,

the row-sensing electrodes and column-sensing electrodes defining interleaved combs therebetween,

each comb comprising at least two fingers,

at least one regular row-shaped row-sensing electrode having fingers extending toward the top edge and having fingers extending toward the bottom edge,

at least one row of column-sensing electrodes having fingers extending toward the top edge and having fingers extending toward the bottom edge.

- 20. (new) The capacitive touch pad of claim 19 wherein the fingers are no wider than eight mils.

- 21. (new) The capacitive touch pad of claim 19 wherein the fingers define spaces therebetween, and the spaces are no wider than eight mils.

- 22. (new) The capacitive touch pad of claim 19 further comprising a second layer, the first layer lying between the cover and second layers, the second layer comprising a ground plane.

- 23. (new) The capacitive touch pad of claim 22 further comprising a third layer, the second layer lying between the first and third layers, the third layer bearing circuitry.

- 24. (new) The capacitive touch pad of claim 19 wherein in the first layer further comprises annular copper around the electrodes.

- 25. (new) The capacitive touch pad of claim 24 wherein the annular copper is connected to ground

potential.

- 26. (new) The capacitive touch pad of claim 22 further comprising an isolator/dielectric layer between the first and second layers.
- 27. (new) The capacitive touch pad of claim 23 further comprising an isolator/dielectric layer between the second and third layers.
- 28. (new) The capacitive touch pad of claim 19 wherein the number of rows is at least three and the number of columns is at least three.
- 29. (new) The capacitive touch pad of claim 28 wherein the number of rows is at least eleven and the number of columns is at least thirteen.
- 30. (new) The capacitive touch pad of claim 19 wherein each of the column-sensing electrodes has fingers extending toward the top edge and has fingers extending toward the bottom edge.